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Notice of Allowability	Application No.	Applicant(s)	
	09/506,224	SHIRAISHI ET AL.	
	Examiner	Art Unit	
	A. Dexter Tugbang	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed on 11/8/04.
 2. ☒ The allowed claim(s) is/are 13-18 and 24-29.
 3. ☒ The drawings filed on 17 February 2000 are accepted by the Examiner.
 4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/033,789.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Arguments

1. With respect to the applicant(s) arguments in the Appeal Brief filed on 11/8/05, the examiner respectfully disagrees with the applicant(s) assertion that the applied art does not teach mounting the head IC chip on the connecting device at a mounting position so as to face the magnetic disc. Clearly, at least Hosokawa et al teach mounting the head IC chip 8 on the connecting device at a mounting position so as to face the magnetic disc 7 (in Fig. 2).

However, after having reconsidered the references to JP'668, Hosokawa et al, and Frater et al, these previously applied references do not teach selecting the mounting position of the head IC chip to be located on the connecting device where the head IC chip is always exposed to a flow of air produced by rotations of the magnetic disc so that the head IC chip is continuously cooled by the flow of air at least when the head IC chip is in operation for the following reasons.

While the examiner's position is that Hosokawa and JP'668 inherently each have cooling aspects of the head IC chip and that each do teach rotations of the magnetic disc during operation. Hosokawa and JP'668 do not explicitly say that the head IC chip is continuously cooled by always being exposed to a flow of air produced by rotations of the magnetic disc.

Frater on the other hand, does teach air flow to cool (at col. 2, lines 57-61) the head IC chip. However, Frater does not teach that this air flow is produced directly by rotations of the magnetic disc.

Accordingly, the rejections applied in the previous Office Action utilizing the above references (Final Rejection, dated 5/13/03) have been withdrawn.

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In addition to the above, the examiner would like to discuss the reference to Adley (U. S. Patent 5,956,211) as this reference was cited previously, but was never applied during any of the previous Office Actions. Adley does teach that air flow is produced directly by rotations of the magnetic disc, including cooling of the head IC chip (see col. 9, lines 15-36). However, the head IC chip of Adley is cooled by heat conducting fibers of the suspension arm, not by any flow of air produced by rotations of the magnetic disc. Adley does not teach that the head IC chip is always exposed to a flow of air produced by rotations of the magnetic disc so that the head IC chip is continuously cooled by the flow of air at least when the head IC chip is in operation.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows.

This application is in condition for allowance except for the presence of Claims 1-12 and 19-23 directed to an invention non-elected without traverse.

Accordingly, Claims 1-12 and 19-23 have been cancelled.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance.

For the reasons expressly stated above, the prior art does not teach all of the limitations of the claimed invention including selecting the mounting position of the head IC chip to be located on the connecting device where the head IC chip is always exposed to a flow of air produced by rotations of the magnetic disc so that the head IC chip is continuously cooled by the flow of air at least when the head IC chip is in operation (as required in each of Claims 13, 18 and 29).

Accordingly, Claims 13-18 and 24-29 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

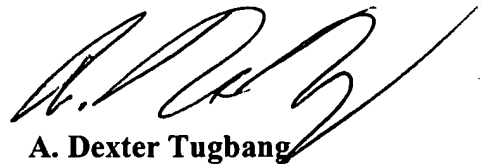
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Dexter Tugbang whose telephone number is 571-272-4570. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Primary Examiner
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